

**FEB 24 1982**

**U.S. DEPARTMENT OF LABOR  
WORKPLACE STANDARDS ADMINISTRATION  
BUREAU OF LABOR STANDARDS**

*DPM 2209*  
FORM NO OSHA-20 (MODIFIED)  
MAY 1971

**MATERIAL SAFETY DATA SHEET**

MDC CONTROL NO. \_\_\_\_\_

\*Trademark of M&T Chemicals Inc.

**SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION**

MANUFACTURER'S NAME <b>M&amp;T Chemicals Inc.</b>		EMERGENCY TELEPHONE NO. <b>201-499-2401 - during office hours</b>
ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE) <b>P.O. Box 1104, Rahway, New Jersey 07065</b>		<b>8:30 am - 4:30 pm</b>
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS <b>M&amp;T* Primer 227-P</b>
CHEMICAL FAMILY	FORMULA <b>Proprietary epoxy type primer</b>	

**SECTION II: HAZARDOUS INGREDIENTS\***

PAINTS, PRESERVATIVES/SOLVENTS	%	TLV (UNITS)	ALLOYS AND METALLIC COATINGS	%	TLV (UNITS)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES*				%	TLV (UNITS)

**SECTION III: PHYSICAL DATA**

BOILING POINT (°F)		SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)		EVAPORATION RATE (_____ = 1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR	<b>White liquid - ketone odor</b>		

**SECTION IV: FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (METHOD USED) <b>less than 80°F</b>	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA <b>CO<sub>2</sub>, dry chemical, foam</b>			
SPECIAL FIRE FIGHTING PROCEDURES			

UNUSUAL FIRE AND EXPLOSION HAZARDS

\*PLEASE DO NOT USE GENERALIZATIONS, SUCH AS PETROLEUM HYDROCARBONS, ALCOHOL, KETONES.  
USE SPECIFIC CHEMICAL NAMES, SUCH AS METHANOL, BENZENE, PERCHLOROETHYLENE.

## SECTION V: HEALTH HAZARD DATA

## THRESHOLD LIMIT VALUE

## EFFECTS OF OVEREXPOSURE

May be irritating to eyes, skin, and respiratory system. Probably slightly to moderately toxic by ingestion.

## EMERGENCY AND FIRST AID PROCEDURES

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

Call a physician. Flush skin with water. For inhalation, remove individual to a non-contaminated area. For ingestion; if conscious, induce vomiting. Call a physician.

## SECTION VI: REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

## INCOMPATIBILITY (MATERIALS TO AVOID)

Strong oxidizing agents may ignite flammable materials.

## HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition temperature 500°-650°F -- CO<sub>2</sub>, CO, H<sub>2</sub>O, Aldehydes

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

## SECTION VII: SPILL OR LEAK PROCEDURES

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Transfer to covered metal container. Do not allow smoking or open flames in area.

Soak up spill with sand or earth.

## WASTE DISPOSAL METHOD

Industrial waste system. Observe all federal, state, and local regulations regarding health and pollution in chemical disposal.

## SECTION VIII: SPECIAL PROTECTION INFORMATION

## RESPIRATORY PROTECTION (SPECIFY TYPE)

Wear approved respirator when working in confined areas.

VENTILATION	LOCAL EXHAUST	SPECIAL
	Use with adequate ventilation	
	MECHANICAL (GENERAL)	OTHER

## PROTECTIVE GLOVES

Rubber gloves

## EYE PROTECTION

Chemical safety goggles

## OTHER PROTECTIVE EQUIPMENT

## SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid contact with eyes, skin and clothing. Avoid prolonged breathing. Wash thoroughly after handling. Launder contaminated clothing

before re-use.

OTHER PRECAUTIONS Store above freezing and below 105°F. Contains volatile solvents. Keep away from heat, sparks and open flames. Keep container closed when not in use. D.O.T. red label for flammable liquids required for transportation. Store and use in accordance with normal standards of good practice for handling industrial paints.

PREPARED BY

DATE  
3-8-72



Trademark

Sheet No. OC-227-P

Revision J/FG

## M&T\* PRIMER 227-P

M&T Primer 227-P, an epoxy type primer, is formulated to provide extraordinary adhesion to subsequent coats of organosols or plastisols under a wide range of application schedules.

Initial bond strength of this primer exceeds the strength of the topcoat at drying schedules ranging from air-dry to baking temperatures of 400°F.

For optimum retention of adhesion, M&T Primer 227-P should be baked at metal temperatures of 365° to 400°F. The retention of adhesion is excellent within this baking range. The retention of adhesion in hot aqueous solution is deminished at bakes below 365°F.

M&T Primer 227-P shifts from white to buff color during baking.

### Metal Preparation

The surface to be primed must be clean and dry, free from traces of oil, shop soil or other contaminants.

### Material Specification

Viscosity:	15 to 17 seconds #2 Zahn cup at 75° to 80°F.
Thinner for viscosity adjustment:	M&T Thinner 200-T.
Total solids:	23 to 25%
Coverage:	650 to 700 sq. ft./gal. at 0.3 to 0.5 mil
Wt/gal.:	7.9 to 8.1 lbs.
Flash point:	Less than 80°F

### Application Procedure

M&T Primer 227-P, which is shipped at a viscosity range of 15 to 17 seconds #2 Zahn cup, is normally

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applied full-bodied without further reduction. At this viscosity, a dried film thickness of 0.3 to 0.5 mils is obtainable. Films heavier than 0.5 mils are to be avoided. M&T Thinner 200-T should be used to maintain the primer at its original viscosity.

On very large articles, it is sometimes necessary to reduce M&T Primer 227-P with M&T Thinner 200-T to maintain primer thickness at less than 0.5 mils. The amount of M&T Thinner 200-T normally will not exceed one volume of thinner to two volumes of primer.

### Spray Application

M&T Primer 227-P should be thinned in the ratio of three volumes of Primer 227-P to one volume of M&T Thinner 200-T. A wet, non-hiding film should be sprayed so as to deposit a total dry thickness of 0.3 to 0.5 mils.

### Drying Schedules

Excellent initial adhesion is obtained using drying schedules ranging from air-dry to bakes of 30 minutes at 400°F.

If plastisol-coated articles such as plating racks and tanks are to be subjected to hot aqueous solutions, a baking cycle of 20 minutes at 365° to 400°F is recommended to maintain retention of adhesion in service. For less severe conditions, any of the following baking schedules may be employed:

1 minute at 425° to 450°F

5 minutes at 375° to 400°F

15 minutes at 365° to 375°F

(over)

**M&T CHEMICALS INC.**

SUBSIDIARY OF AMERICAN CAN COMPANY

GENERAL OFFICES: RAHWAY, NEW JERSEY 07065

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#### **PRECAUTIONARY INFORMATION**

- Caution:** This coating material should be stored and used in accordance with normal standards of good practice for handling industrial paints.
- Storage:** Contains volatile solvents. Keep away from heat, sparks and open flames. Store at temperatures above freezing and below 105°F. Keep containers closed when not in use.
- Use:** Maintain adequate ventilation in working area. Wear approved respirators and protective clothing when working in confined areas. Avoid repeated breathing of concentrated vapors. Prolonged contact of liquid material with the skin may be irritating; wash exposed surface thoroughly with soap and water. In case of eye contact, flush out the eyes with water for 15 minutes and consult a physician.

#### **For Industrial Use Only**

M&T Chemicals Inc. gives no warranty, express or implied, and all products are sold upon condition that purchasers will make their own tests to determine the quality and suitability of the product. M&T Chemicals Inc. shall be in no way responsible for the proper use and service of the product. Any information or suggestions given are without warranty of any kind and purchasers are solely responsible for any loss arising from the use of such information or suggestions. No information or suggestions given by us shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

# M&T Chemicals Inc.

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GENERAL OFFICES, RAHWAY, NEW JERSEY 07065

March 8, 1972

Mr. A. W. Wildanger  
Douglas Aircraft Company  
3855 Lakewood Boulevard  
Long Beach, California 90801

Subject: M&T\* Primer 227-P  
Unichrome\* Coating 218-X  
M&T\* Thinner 200T

Dear Mr. Wildanger:

Please excuse any inconvenience caused by our delay in responding to your request for information on the above-mentioned products.

We have completed and attached Material Safety Data Sheets to satisfy your request. Our Technical Data Sheets for Primer 227-P and Unichrome Coating 218-X are also attached.

If any additional information is required, please do not hesitate to contact me.

Very truly yours,

M&T CHEMICALS INC.

Arthur A. Kornhauser  
Labeling Coordinator

AAK/jw

Att: Material Safety Data Sheets, TDS # OC-227-P (J/FG), TDS # OC-218-X (F/GA).

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